

## LOOP ASSEMBLIES HAVING A CENTRAL LINK

### Abstract

Improved reversibly expandable structures are formed from novel loop assemblies comprising a plurality of links, each of said links having at least one center pivot joint and a plurality of end pivot joints, each of at least two of said plurality of end pivot joints proximate to the outer edge of said loop assembly and connected to another link; each of said plurality of links being connected to another one of said plurality of links by at least two end pivot joints thereby forming a link pair, said loop assembly comprising at least three link pairs, each of said at least three link pairs connected to at least two other link pairs through at least one of said end pivot joints; each of said at least three link pairs connected to a central piece that is central to the loop assembly, said central piece being rotatable around a central axis, wherein the rotation of the central piece reversibly expands said loop assembly.